

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Gary Karlin Michelson, M.D. ) Group Art Unit: (3764)  
Serial No.: Cont. of 09/404,396 )  
Filed: July 31,2003 ) Examiner: (M. Brown)  
For: Method for the Delivery of Electrical )  
Current to Promote Bone Growth )  
Between Adjacent Bone Masses )

Mail Stop: PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicant brings to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed concurrently with the filing of the above-referenced application.

Copies of the following listed documents are attached:

SW 106 101	DE 1961531
EP 0 179 695	DE 3101333
EP 0 260 044	DE 3132520
FR 2 581 336	DE 3505567

English translations and/or abstracts of the non-English documents are enclosed. Copies of the remaining listed documents were previously submitted or cited

in a prior application, serial no. 09/404,396, filed September 23, 1999, upon which applicant relies for the benefits provided in 35 U.S.C. § 120. Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 50-1066.

Respectfully submitted,

MARTIN & FERRARO, LLP

Date: 7-31-03

By: 

Amedeo F. Ferraro  
Registration No. 37,129  
4557 Lake O'Pines Street, NE  
Hartville, Ohio 44632  
Telephone: 330-877-0700  
Facsimile: 330-877-2030

Substitute for FORM PTO-1449	Attorney Docket Number 101.0037-02000	Custom r No. 22882
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>	<b>Applicant</b> Gary Karlin Michelson, M.D.	<b>Application Number</b> Cont. of 09/404,396
<i>(Use several sheets if necessary)</i>	<b>Filing Date</b> July 31, 2003	<b>Group Art Unit</b> 3764
Sheet <u>1</u> of <u>6</u>		<b>Examiner</b> M. Brown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/M.B./	350,420	10/05/1886	Dillon			
	1,137,585	4/27/1915	Craig			
	2,065,659	12/29/1936	Cullen			
	2,181,746	11/28/1939	Siebrandt			
	2,243,718	5/27/1941	De G. Moreira			
	2,372,622	3/27/1945	Fassio			
	2,514,665	7/11/1950	Myller			
	2,537,070	1/9/1951	Longfellow			
	2,543,780	3/6/1951	Hipps et al.			
	2,677,369	5/4/1954	Knowles			
	2,774,350	12/18/1956	Cleveland			
	2,789,558	4/23/1957	Rush			
	2,832,343	4/29/1958	Mose			
	2,842,131	7/8/1958	Smith			
	3,128,768	4/14/1964	Giestauts			
	3,298,372	1/17/1967	Feinberg			
	3,426,364	2/11/1969	Lumb			
	3,486,505	12/30/1969	Morrison			
	3,604,487	9/14/1971	Gilbert			
	3,605,123	9/20/1971	Hahn			
	3,709,219	1/9/1973	Halloran			
	3,720,959	3/20/1973	Hahn			
	3,750,652	8/7/1973	Sherwin			
	3,848,601	11/19/1974	Ma et al.			
	3,855,638	12/24/1974	Pilliar			
	3,867,728	2/25/1975	Stubstad et al.			
	3,867,950	2/25/1975	Fischell			
	3,875,595	4/8/1975	Froning			
	3,888,260	6/10/1975	Fischell			

3,892,232	7/1/1975	Neufeld			
3,905,047	9/16/1975	Long			
3,915,151	10/28/1975	Kraus			
3,918,440	11/11/1975	Krause			
3,942,535	3/9/1976	Schulman			
3,948,262	4/6/1976	Zaffaroni			
3,952,334	4/27/1976	Bokros et al.			
3,964,473	6/1976	Wickham			
3,987,499	10/26/1976	Scharbach et al.			
4,016,651	4/12/1977	Kawahara et al.			
4,027,392	6/7/1977	Sawyer et al.			
Des. 245,259	8/2/1977	Shen			
4,051,905	10/4/1977	Kleine			
4,059,115	11/22/1977	Jumashev et al.			
4,070,514	1/24/1978	Entherly et al.			
4,082,097	4/4/1978	Mann et al.			
4,086,701	5/2/1978	Kawahara et al.			
4,124,026	11/7/1978	Berner et al.			
4,142,517	3/6/1979	Stavropoulos et al.			
4,168,326	9/18/1979	Broemer et al.			
4,175,555	11/27/1979	Herbert			
4,177,524	12/11/1979	Grell et al.			
4,181,457	1/1/1980	Holmes			
4,195,367	4/1980	Kraus			
4,197,850	4/15/1980	Schulman et al.			
4,206,516	6/10/1980	Pilliar			
4,222,128	9/16/1980	Tomonaga et al.			
4,232,679	11/11/1980	Schulman			
Des. 257,511	11/11/1980	Zahn			
4,237,948	12/9/1980	Jones et al.			
4,259,072	3/31/1981	Hirabayashi et al.			
4,262,369	4/21/1981	Roux			
4,271,832	6/9/1981	Evans et al.			
4,289,123	9/15/1981	Dunn			
4,293,962	10/13/1981	Fuson			
4,309,777	1/12/1982	Patil			
4,328,593	5/11/1982	Sutter et al.			
4,333,469	6/1/1982	Jeffcoat			
4,341,206	7/27/1982	Perrett et al.			

4,349,921	9/21/1982	Kuntz			
4,356,572	11/2/1982	Guillemin et al.			
4,401,112	8/30/1983	Rezaian			
4,405,319	9/20/1983	Cosentino			
4,414,979	11/15/1983	Hirshorn et al.			
4,423,721	1/3/1984	Otte et al.			
4,439,152	3/27/1984	Small			
4,450,834	5/29/1984	Fischer			
4,484,570	11/27/1984	Sutter et al.			
4,492,226	1/8/1985	Belykh et al.			
4,501,269	2/26/1985	Bagby			
4,507,115	3/26/1985	Kambara et al.			
RE. 31,865	4/16/1985	Roux			
4,530,360	7/23/1985	Duarte			
4,535,485	8/20/1985	Ashman et al.			
4,542,539	9/24/1985	Rowe, Jr. et al.			
4,545,374	10/8/1985	Jacobson			
4,547,390	10/15/1985	Ashman et al.			
4,549,547	10/29/1985	Brighton et al.			
4,552,200	11/12/1985	Sinha et al.			
4,553,273	11/19/1985	Wu			
4,554,914	11/26/1985	Kapp et al.			
4,570,623	2/18/1986	Ellison et al.			
4,570,624	2/18/1986	Wu			
4,599,086	7/8/1986	Doty			
4,600,000	7/15/1986	Edwards			
4,602,638	7/29/1986	Adams			
4,604,995	8/12/1986	Stephens			
4,608,052	8/26/1986	Van Kampen et al.			
4,611,581	9/16/1986	Steffee			
4,619,264	10/28/1986	Singh			
4,628,921	12/16/1986	Rouso			
4,634,720	1/6/1987	Dorman et al.			
4,636,217	1/13/1987	Ogilvie et al.			
4,636,526	1/13/1987	Dorman et al.			
4,645,503	2/24/1987	Lin et al.			
4,653,486	3/31/1987	Coker			
4,655,777	4/7/1987	Dunn			
4,661,536	4/28/1987	Dorman et al.			

4,665,920	5/19/1987	Campbell			
4,677,883	7/7/1987	Lee			
4,677,972	7/7/1987	Tornier			
4,693,721	9/15/1987	Ducheyne			
4,696,290	9/29/1987	Steffee			
4,698,375	10/6/1987	Dorman et al.			
4,710,075	12/1/1987	Davison			
4,713,004	12/15/1987	Linkow et al.			
4,714,469	12/22/1987	Kenna			
4,721,103	1/26/1988	Freedland			
4,736,738	4/12/1988	Lipovsek et al.			
4,743,256	5/10/1988	Brantigan			
4,743,260	5/10/1988	Burton			
4,759,766	7/26/1988	Buettner-Janzen et al.			
4,759,769	7/26/1988	Hedman et al.			
4,769,881	9/13/1988	Pedigo et al.			
4,781,591	11/1/1988	Allen			
4,790,303	12/13/1988	Steffee			
4,820,305	4/11/1989	Harms et al.			
4,830,000	5/16/1989	Shutt			
4,834,757	5/30/1989	Brantigan			
4,848,327	7/18/1989	Perdue			
4,851,008	7/25/1989	Johnson			
4,863,477	9/5/1989	Monson			
4,865,603	9/12/1989	Noiles			
4,877,020	10/31/1989	Vich			
4,878,915	11/7/1989	Brantigan			
4,903,882	2/27/1990	Long			
4,904,260	2/27/1990	Ray et al.			
4,904,261	2/27/1990	Dove et al.			
4,911,718	3/27/1990	Lee et al.			
4,913,144	4/3/1990	Del Medico			
4,936,848	6/26/1990	Babgy			
4,943,291	7/24/1990	Tanguy			
4,955,885	9/11/1990	Meyers			
4,955,908	9/11/1990	Frey et al.			
4,957,495	9/18/1990	Kluger			
4,960,420	10/2/1990	Goble et al.			
4,961,740	10/1/1990	Ray			

4,968,316	11/6/1990	Hergenroeder			
4,969,888	11/13/1990	Scholten et al.			
4,987,904	1/29/1991	Wilson			
5,015,247	5/14/1991	Michelson			
5,015,255	5/14/1991	Kuslich			
5,026,373	6/25/1991	Ray et al.			
5,030,236	7/9/1991	Dean			
5,055,104	10/8/1991	Ray			
5,059,193	10/22/1991	Kuslich			
5,071,437	12/10/1991	Steffee			
5,084,050	1/28/1992	Draenert			
5,102,414	4/7/1992	Kirsch			
5,116,304	5/26/1992	Cadwell			
5,122,130	6/16/1992	Keller			
5,123,926	6/23/1992	Pisharodi			
5,192,327	3/9/1993	Brantigan			
5,258,031	11/2/1993	Salib et al.			
5,263,953	11/23/1993	Bagby			
5,279,292	1/18/1994	Baumann et al.			
5,292,252	3/8/1994	Nickerson et al.			
5,306,309	4/26/1994	Wagner et al.			
5,364,399	11/15/1994	Lowery et al.			
5,370,662	12/6/1994	Stone et al.			
5,393,036	2/28/1995	Sheridan			
RE. 34,871	3/7/1995	McGuire et al.			
5,396,880	3/14/1995	Kagan et al.			
5,397,364	3/14/1995	Kozak et al.			
5,425,772	6/20/1995	Brantigan			
5,435,723	7/25/1995	O'Brien			
5,441,527	8/15/1995	Erickson et al.			
5,489,307	2/6/1996	Kuslich et al.			
5,489,308	2/6/1996	Kuslich et al.			
5,571,109	11/5/1996	Bertagnoli			
5,628,317	5/13/1997	Starkebaum et al.			
5,807,397	9/15/1998	Barreras			

# **FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	CA 1020233	11/1/1977	Canada			Equivalent to DE 2446039
	DE 1961531	7/9/1970	Germany			Claim Only
	DE 2446039	9/26/1974	Germany			Abstract Only
	DE 3101333A1	12/24/1981	Germany			Abstract Only
	DE 3132520 A1	6/16/1982	Germany			Abstract Only
	DE 3505567 A1	6/5/1986	Germany			Abstract Only
	DE 4104359 A1	2/13/1991	Germany			U.S. Equivalent 5,279,292
	EP 0 162 005	4/13/1985	Europe			Abstract Only
	EP 0 179 695	4/30/1986	Europe			Abstract Only
	EP 0 260 044	3/16/1988	Europe			N/A
	EP 0 307 241	3/15/1989	Europe			N/A
	EP 0 499 465 A1	8/19/1992	Europe			N/A
	EP 0 599 419 A2	6/1/1994	Europe			Abstract Only
	FR 2581336	11/7/1986	France			Abstract Only
	SW 106101	7/21/1939	Sweden			Abstract Only
	WO 84/01298	4/12/1984	PCT			N/A

## **OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

"Direct Current Electrical Bone Growth Stimulation for Spinal Fusion", Kane, W.J., SPINE, Vol. 13, No. 3, March 1988.
EBI Medical Systems, The SpF-T Spinal Fusion Stimulator: An Efficacious Adjunct that Meets the Diverse Needs of Spine Patients, (1991).
EBI Medical Systems, The Use of Direct Current for Electrically Induced Osteogenesis, The Positive Effect of an Electronegative Charge on Bone Growth,* (1993).

**EXAMINER**

/Michael Brown/

**DATE CONSIDERED**

09/28/2008

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.B./